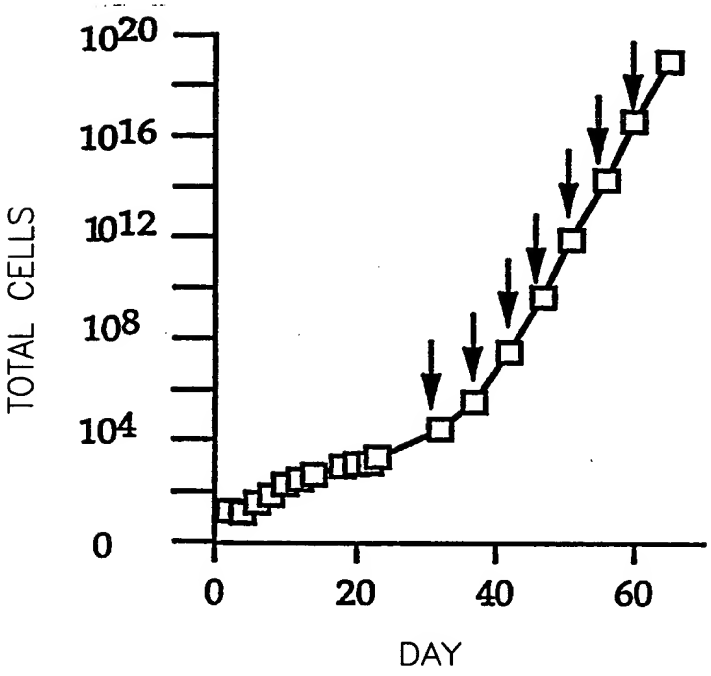


FIG. 1

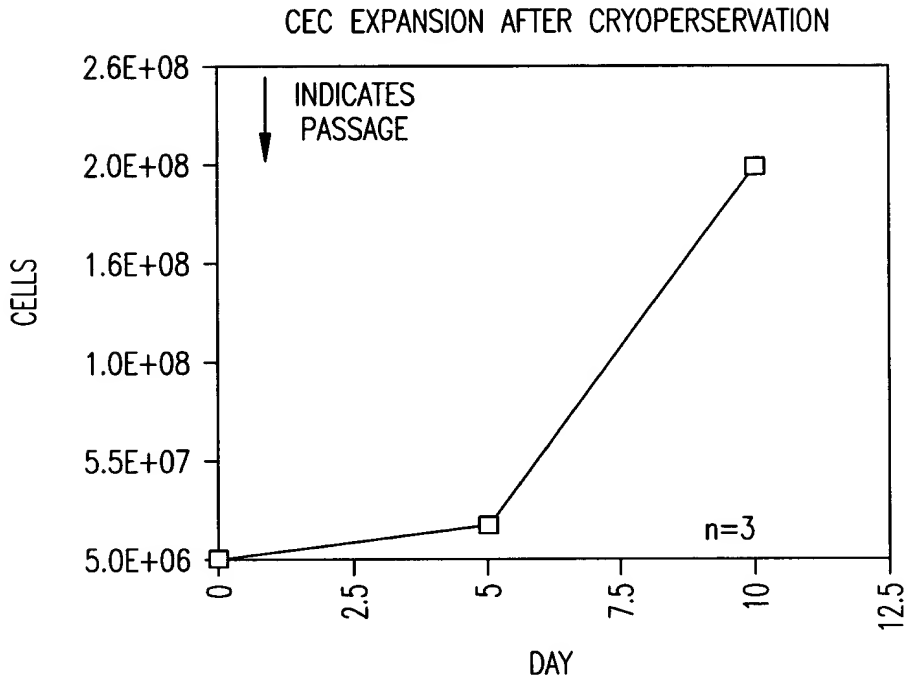


FIG. 2

HFVIII/SQ/egfp, HF8SQgfp.gp, original HB- with B-domain SQ insert based on Lind t al, Bur J Biochem, 232, p21 prim r sequence, containing eGFP protein s qu nc $

ATGCAAATAGAGCTCTCCACCTGCTTCTTTCTGTGCCTTTTGCGAT
TCTGCTTT
AGTGCCACCAGAAGATACTACCTGGGTGCAGTGGAACTGTCATGG
GACTATATGCAAAGTGA
TCTCGGTGAGCTGCCTGTGGACGCAAGATTTCCTCCTAGAGTGCC
AAAATCTTTTCCATTCAA
CACCTCAGTCGTGTACAAAAAGACTCTGTTTGTAGAATTCACGGTT
CACCTTTTCAACATCGC
TAAGCCAAGGCCACCCTGGATGGGTCTGCTAGGTCCTACCATCCA
GGCTGAGGTTTATGATAC
AGTGGTCATTACACTTAAGAACATGGCTTCCCATCCTGTCAGTCTT
CATGCTGTTGGTGTATCC
TACTGGAAAGCTTCTGAGGGAGCTGAATATGATGATCAGACCAGT
CAAAGGGAGAAAGAAGA
TGATAAAGTCTTCCCTGGTGGAAGCCATACATATGTCTGGCAGGTC
CTGAAAGAGAATGGTCC
AATGGCCTCTGACCCACTGTGCCTTACCTACTCATATCTTTCTCAT
GTGGACCTGGTAAAAGA
CTTGAATTCAGGCCTCATTGGAGCCCTACTAGTATGTAGAGAAGG
GAGTCTGGCCAAGGAAA
AGACACAGACCTTGCACAAATTTATACTACTTTTTGCTGTATTTGA
TGAAGGGAAAAGTTGGC
ACTCAGAAACAAAGAACTCCTTGATGCAGGATAGGGATGCTGCAT
CTGCTCGGGCCTGGCCT
AAAATGCACACAGTCAATGGTTATGTAAACAGGTCTCTGCCAGGT
CTGATTGGATGCCACAG
GAAATCAGTCTATTGGCATGTGATTGGAATGGGCACCACTCCTGA
AGTGCACTCAATATTCCT
CGAAGGTCACACATTTCTTGTGAGGAACCATCGCCAGGCGTCCTT
GGAAATCTCGCCAATAAC
TTTCCTTACTGCTCAAACACTCTTGATGGACCTTGGACAGTTTCTA
CTGTTTTGTCATATCTCT
TCCCACCAACATGATGGCATGGAAGCTTATGTCAAAGTAGACAGC
TGTCCAGAGGAACCCCA
ACTACGAATGAAAAATAATGAAGAAGCGGAAGACTATGATGATGA
TCTTACTGATTCTGAAA
TGGATGTGGTCAGGTTTGATGATGACAACTCTCCTTCCTTTATCCA
AATTCGCTCAGTTGCCA
AGAAGCATCCTAAAACTTGGGTACATTACATTGCTGCTGAAGAGG
AGGACTGGGACTATGCT
CCCTTAGTCCTCGCCCCCGATGACAGAAGTTATAAAAGTCAATATT
TGAACAATGGCCCTCAG
CGGATTGGTAGGAAGTACAAAAAAGTCCGATTTATGGCATACACA
GATGAAACCTTTAAGAC
TCGTGAAGCTATTCAGCATGAATCAGGAATCTTGGGACCTTTACTT
TATGGGGAAGTTGGAGA
CACACTGTTGATTATATTTAAGAATCAAGCAAGCAGACCATATAA
CATCTACCCTCACGGAAT
CACTGATGTCCGTCCTTTGTATTCAAGGAGATTACCAAAAGGTGTA
AAACATTTGAAGGATTT
TCCAATTCTGCCAGGAGAAATATTCAAATATAAATGGACAGTGAC

FIG. 3A

TGTAGAAGATGGGCCAA
CTAAATCAGATCCTCGGTGCCTGACCCGCTATTACTCTAGTTTCGT
TAATATGGAGAGAGATC
TAGCTTCAGGACTCATTGGCCCTCTCCTCATCTGCTACAAAGAATC
TGTAGATCAAAGAGGAA
ACCAGATAATGTCAGACAAGAGGAATGTCATCCTGTTTTCTGTATT
TGATGAGAACCGAAGCT
GGTACCTCACAGAGAATATACAACGCTTTCTCCCCAATCCAGCTG
GAGTGCAGCTTGAGGATC
CAGAGTTCCAAGCCTCCAACATCATGCACAGCATCAATGGCTATG
TTTTTGATAGTTTGCAGT
TGTCAGTTTGTTTGCATGAGGTGGCATACTGGTACATTCTAAGCAT
TGGAGCACAGACTGACT
TCCTTTCTGTCTTCTTCTCTGGATATACCTTCAAACACAAAATGGTC
TATGAAGACACACTCAC
CCTATTCCCATTCTCAGGAGAAACTGTCTTCATGTCGATGGAAAAC
CCAGGTCTATGGATTCT
GGGGTGCCACAACTCAGACTTTCGGAACAGAGGCATGACCGCCTT
ACTGAAGGTTTCTAGTTG
TGACAAGAACACTGGTGATTATTACGAGGACAGTTATGAAGATAT
TTCAGCATACTTGCTGAG
TAAAAACAATGCCATTGAACCTAGG
AGCTTCTCTCAGAATATGGTGAGCAAGGGCGAGGAGC
TGTTCACCGG GGTGGTGCCC
ATCCTGGTCG AGCTGGACGG CGACGTAAAC GGCCACAAGT
TCAGCGTGTC CGGCGAGGGC
GAGGGCGATG CCACCTACGG CAAGCTGACC CTGAAGTTCA
TCTGCACCAC CGGCAAGCTG
CCCGTGCCCT GGCCCACCCT CGTGACCACC CTGACCTACG
GCGTGCAGTG CTTCAGCCGC
TACCCCGACC ACATGAAGCA GCACGACTTC TTCAAGTCCG
CCATGCCCGA AGGCTACGTC
CAGGAGCGCA CCATCTTCTT CAAGGACGAC GGCAACTACA
AGACCCGCGC CGAGGTGAAG
TTCGAGGGCG ACACCCTGGT GAACCGCATC GAGCTGAAGG
GCATCGACTT CAAGGAGGAC
GGCAACATCC TGGGGCACAA GCTGGAGTAC AACTACAACA
GCCACAACGT CTATATCATG
GCCGACAAGC AGAAGAACGG CATCAAGGTG AACTTCAAGA
TCCGCCACAA CATCGAGGAC
GGCAGCGTGC AGCTCGCCGA CCACTACCAG CAGAACACCC
CCATCGGCGA CGGCCCCGTG
CTGCTGCCCG ACAACCACTA CCTGAGCACC CAGTCCGCCC
TGAGCAAAGA CCCCAACGAG
AAGCGCGATC ACATGGTCCT GCTGGAGTTC GTGACCGCCG
CCGGGATCAC TCTCGGCATG
GACGAGCTGT ACAAGTATCCACCAGTCTTGAAACGCCATCAACGG
GAAATAACTCGTACTACTCT
TCAGTCAGATCAAGAGG
AAATTGACTATGATGATACCATATCAGTTGAAATGAAGAAGGAAG
ATTTTGACATTTATGATG
AGGATGAAAATCAGAGCCCCCGCAGCTTTCAAAAGAAAACACGAC
ACTATTTTATTGCTGCA
GTGGAGAGGCTCTGGGATTATGGGATGAGTAGCTCCCCACATGTT

FIG. 3B

CTAAGAAACAGGGCTCA
GAGTGGCAGTGTCCCTCAGTTCAAGAAAGTTGTTTTCCAGGAATTT
ACTGATGGCTCCTTTAC
TCAGCCCTTATACCGTGGAGAACTAAATGAACATTTGGGACTCCT
GGGGCCATATATAAGAG
CAGAAGTTGAAGATAATATCATGGTAACTTTCAGAAATCAGGCCT
CTCGTCCCTATTCCTTCT
ATTCTAGCCTTATTTCTTATGAGGAAGATCAGAGGCAAGGAGCAG
AACCTAGAAAAAACTTT
GTCAAGCCTAATGAAACCAAAACTTACTTTTGGAAAGTGCAACAT
CATATGGCACCCACTAA
AGATGAGTTTGACTGCAAAGCCTGGGCTTATTTCTCTGATGTTGAC
CTGGAAAAAGATGTGCA
CTCAGGCCTGATTGGACCCCTTCTGGTCTGCCACACTAACACACTG
AACCCTGCTCATGGGAG
ACAAGTGACAGTACAGGAATTTGCTCTGTTTTTCACCATCTTTGAT
GAGACCAAAAGCTGGTA
CTTCACTGAAAATATGGAAAGAAACTGCAGGGCTCCCTGCAATAT
CCAGATGGAAGATCCCA
CTTTTAAAGAGAATTATCGCTTCCATGCAATCAATGGCTACATAAT
GGATACACTACCTGGCT
TAGTAATGGCTCAGGATCAAAGGATTCGATGGTATCTGCTCAGCA
TGGGCAGCAATGAAAAC
ATCCATTCTATTCATTTCAGTGGACATGTGTTCACTGTACGAAAAA
AAGAGGAGTATAAAATG
GCACTGTACAATCTCTATCCAGGTGTTTTTGAGACAGTGGAAATGT
TACCATCCAAAGCTGGA
ATTTGGCGGGTGGAATGCCTTATTGGCGAGCATCTACATGCTGGG
ATGAGCACACTTTTTCTG
GTGTACAGCAATAAGTGTCAGACTCCCCTGGGAATGGCTTCTGGA
CACATTAGAGATTTTCAG
ATTACAGCTTCAGGACAATATGGACAGTGGGCCCCAAAGCTGGCC
AGACTTCATTATTCCGG
ATCAATCAATGCCTGGAGCACCAAGGAGCCCTTTTCTTGGATCAA
GGTGGATCTGTTGGCACC
AATGATTATTCACGGCATCAAGACCCAGGGTGCCCGTCAGAAGTT
CTCCAGCCTCTACATCTC
TCAGTTTATCATCATGTATAGTCTTGATGGGAAGAAGTGGCAGACT
TATCGAGGAAATTCCAC
TGGAACCTTAATGGTCTTCTTTGGCAATGTGGATTCATCTGGGATA
AAACACAATATTTTTAA
CCCTCCAATTATTGCTCGATACATCCGTTTGCACCCAACTCATTAT
AGCATTCGCAGCACTCTT
CGCATGGAGTTGATGGGCTGTGATTTAAATAGTTGCAGCATGCCA
TTGGGAATGGAGAGTAA
AGCAATATCAGATGCACAGATTACTGCTTCATCCTACTTTACCAAT
ATGTTTGCCACCTGGTC
TCCTTCAAAAGCTCGACTTCACCTCCAAGGGAGGAGTAATGCCTG
GAGACCTCAGGTGAATA
ATCCAAAAGAGTGGCTGCAAGTGGACTTCCAGAAGACAATGAAAG
TCACAGGAGTAACTACT
CAGGGAGTAAAATCTCTGCTTACCAGCATGTATGTGAAGGAGTTC
CTCATCTCCAGCAGTCAA
GATGGCCATCAGTGGACTCTCTTTTTTCAGAATGGCAAAGTAAAG

FIG. 3C

GTTTTTCAGGGAAATCAA
GACTCCTTCACACCTGTGGTGAACTCTCTAGACCCACCGTTACTGA
CTCGCTACCTTCGAATT
CACCCCCAGAGTTGGGTGCACCAGATTGCCCTGAGGATGGAGGTT
CTGGGCTGCGAGGCACA
GGACCTCTACTGA*

FIG. 3D

ESQREMEO

GAATTCCGGAATTCCAGCTTGCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGG
CTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAG
TCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAG
TCCCGCCCCTAACTCCGCCCATCCCGCCCCTAACTCCGCCCAGTTCCGCCCATTCTCCGCCCCA
TGGCTGACTAATTTTTTTTATTTATGCAGAGGCCGAGGCCGCCTCGGCCTCTGAGCTATTCCAG
AAGTAGTGAGGAGGCTTTTTTGGAGGGGTCCTCCTCGTATAGAAACTCGGACCACTCTGAGACG
AAGGCTCGCGTCCAGGCCAGCACGAAGGAGGCTAAGTGGGAGGGGTAGCGGTCGTTGTCCACTA
GGGGGTCCACTCGCTCCAGGGTGTGAAGACACATGTCGCCCTCTTCGGCATCAAGGAAGGTGAT
TGGTTTATAGGTGTAGGCCACGTGACCGGGTGTTCCTGAAGGGGGGGTATAAAAGGGGGTGGGG
GCGCGTTCGTCCTCACTCTCTTCCGCATCGCTGTCTGCGAGGGCCAGCTGTTGGGCTCGCGGTT
GAGGACAAACTCTTCGCGGTCTTTCCAGTACTCTTGGATCGGAAACCCGTCGGCCTCCGAACGG
TACTCCGCCACCGAGGGACCTGAGCGAGTCCGCATCGACCGGATCGGAAAACCTCTCGAGCCAC
C
ATGCAAATAGAGCTCTCCACCTGCTTCTTTCTGTGCCTTTTGCGATTCTGCTTTAGTGCCACCA
GAAGATACTACCTGGGTGCAGTGGAACTGTCATGGGACTATATGCAAAGTGATCTCGGTGAGCT
GCCTGTGGACGCAAGATTTCCTCCTAGAGTGCCAAAATCTTTTCCATTCAACACCTCAGTCGTG
TACAAAAAGACTCTGTTTGTAGAATTCACGGTTCACCTTTTCAACATCGCTAAGCCAAGGCCAC
CCTGGATGGGTCTGCTAGGTCCTACCATCCAGGCTGAGGTTTATGATACAGTGGTCATTACACT
TAAGAACATGGCTTCCCATCCTGTCAGTCTTCATGCTGTTGGTGTATCCTACTGGAAAGCTTCT
GAGGGAGCTGAATATGATGATCAGACCAGTCAAAGGGAGAAAGAAGATGATAAAGTCTTCCCTG
GTGGAAGCCATACATATGTCTGGCAGGTCCTGAAAGAGAATGGTCCAATGGCCTCTGACCCACT
GTGCCTTACCTACTCATATCTTTCTCATGTGGACCTGGTAAAAGACTTGAATTCAGGCCTCATT
GGAGCCCTACTAGTATGTAGAGAAGGGAGTCTGGCCAAGGAAAAGACACAGACCTTGCACAAAT
TTATACTACTTTTTGCTGTATTTGATGAAGGGAAAAGTTGGCACTCAGAAACAAAGAACTCCTT
GATGCAGGATAGGGATGCTGCATCTGCTCGGGCCTGGCCTAAAATGCACACAGTCAATGGTTAT
GTAAACAGGTCTCTGCCAGGTCTGATTGGATGCCACAGGAAATCAGTCTATTGGCATGTGATTG
GAATGGGCACCACTCCTGAAGTGCACTCAATATTCCTCGAAGGTCACACATTTCTTGTGAGGAA
CCATCGCCAGGCGTCCTTGGAAATCTCGCCAATAACTTTCCTTACTGCTCAAACACTCTTGATG
GACCTTGGACAGTTTCTACTGTTTTGTCATATCTCTTCCCACCAACATGATGGCATGGAAGCTT
ATGTCAAAGTAGACAGCTGTCCAGAGGAACCCCAACTACGAATGAAAAATAATGAAGAAGCGGA
AGACTATGATGATGATCTTACTGATTCTGAAATGGATGTGGTCAGGTTTGATGATGACAACTCT
CCTTCCTTTATCCAAATTCGCTCAGTTGCCAAGAAGCATCCTAAAACTTGGGTACATTACATTG
CTGCTGAAGAGGAGGACTGGGACTATGCTCCCTTAGTCCTCGCCCCCGATGACAGAAGTTATAA
AAGTCAATATTTGAACAATGGCCCTCAGCGGATTGGTAGGAAGTACAAAAAAGTCCGATTTATG
GCATACACAGATGAAACCTTTAAGACTCGTGAAGCTATTCAGCATGAATCAGGAATCTTGGGAC
CTTTACTTTATGGGGAAGTTGGAGACACACTGTTGATTATATTTAAGAATCAAGCAAGCAGACC
ATATAACATCTACCCTCACGGAATCACTGATGTCCGTCCTTTGTATTCAAGGAGATTACCAAAA

FIG. 4A

GGTGTAAAACATTTGAAGGATTTTCCAATTCTGCCAGGAGAAATATTCAAATATAAATGGACAG
TGACTGTAGAAGATGGGCCAACTAAATCAGATCCTCGGTGCCTGACCCGCTATTACTCTAGTTT
CGTTAATATGGAGAGAGATCTAGCTTCAGGACTCATTGGCCCTCTCCTCATCTGCTACAAAGAA
TCTGTAGATCAAAGAGGAAACCAGATAATGTCAGACAAGAGGAATGTCATCCTGTTTTCTGTAT
TTGATGAGAACCGAAGCTGGTACCTCACAGAGAATATACAACGCTTTCTCCCCAATCCAGCTGG
AGTGCAGCTTGAGGATCCAGAGTTCCAAGCCTCCAACATCATGCACAGCATCAATGGCTATGTT
TTTGATAGTTTGCAGTTGTCAGTTTGTTTGCATGAGGTGGCATACTGGTACATTCTAAGCATTG
GAGCACAGACTGACTTCCTTTCTGTCTTCTTCTCTGGATATACCTTCAAACACAAAATGGTCTA
TGAAGACACACTCACCCTATTCCCATTCTCAGGAGAAACTGTCTTCATGTCGATGGAAAACCCA
GGTCTATGGATTCTGGGGTGCCACAACTCAGACTTTCGGAACAGAGGCATGACCGCCTTACTGA
AGGTTTCTAGTTGTGACAAGAACACTGGTGATTATTACGAGGACAGTTATGAAGATATTTCAGC
ATACTTGCTGAGTAAAAACAATGCCATTGAACCTAGGAGCTTCTCTCAGAATCCACCAGTCTTG
AAACGCCATCAACGGGAAATAACTCGTACTACTCTTCAGTCAGATCAAGAGGAAATTGACTATG
ATGATACCATATCAGTTGAAATGAAGAAGGAAGATTTTGACATTTATGATGAGGATGAAAATCA
GAGCCCCCGCAGCTTTCAAAAGAAAACACGACACTATTTTATTGCTGCAGTGGAGAGGCTCTGG
GATTATGGGATGAGTAGCTCCCCACATGTTCTAAGAAACAGGGCTCAGAGTGGCAGTGTCCCTC
AGTTCAAGAAAGTTGTTTTCCAGGAATTTACTGATGGCTCCTTTACTCAGCCCTTATACCGTGG
AGAACTAAATGAACATTTGGGACTCCTGGGGCCATATATAAGAGCAGAAGTTGAAGATAATATC
ATGGTAACTTTCAGAAATCAGGCCTCTCGTCCCTATTCCTTCTATTCTAGCCTTATTTCTTATG
AGGAAGATCAGAGGCAAGGAGCAGAACCTAGAAAAAACTTTGTCAAGCCTAATGAAACCAAAAC
TTACTTTTGGAAAGTGCAACATCATATGGCACCCACTAAAGATGAGTTTGACTGCAAAGCCTGG
GCTTATTTCTCTGATGTTGACCTGGAAAAAGATGTGCACTCAGGCCTGATTGGACCCCTTCTGG
TCTGCCACACTAACACACTGAACCCTGCTCATGGGAGACAAGTGACAGTACAGGAATTTGCTCT
GTTTTTCACCATCTTTGATGAGACCAAAAGCTGGTACTTCACTGAAAATATGGAAAGAAACTGC
AGGGCTCCCTGCAATATCCAGATGGAAGATCCCACTTTTAAAGAGAATTATCGCTTCCATGCAA
TCAATGGCTACATAATGGATACACTACCTGGCTTAGTAATGGCTCAGGATCAAAGGATTCGATG
GTATCTGCTCAGCATGGGCAGCAATGAAAACATCCATTCTATTCATTTCAGTGGACATGTGTTC
ACTGTACGAAAAAAAGAGGAGTATAAAATGGCACTGTACAATCTCTATCCAGGTGTTTTTGAGA
CAGTGGAAATGTTACCATCCAAAGCTGGAATTTGGCGGGTGGAATGCCTTATTGGCGAGCATCT
ACATGCTGGGATGAGCACACTTTTTCTGGTGTACAGCAATAAGTGTCAGACTCCCCTGGGAATG
GCTTCTGGACACATTAGAGATTTTCAGATTACAGCTTCAGGACAATATGGACAGTGGGCCCCAA
AGCTGGCCAGACTTCATTATTCCGGATCAATCAATGCCTGGAGCACCAAGGAGCCCTTTTCTTG
GATCAAGGTGGATCTGTTGGCACCAATGATTATTCACGGCATCAAGACCCAGGGTGCCCGTCAG
AAGTTCTCCAGCCTCTACATCTCTCAGTTTATCATCATGTATAGTCTTGATGGGAAGAAGTGGC
AGACTTATCGAGGAAATTCCACTGGAACCTTAATGGTCTTCTTTGGCAATGTGGATTCATCTGG
GATAAAACACAATATTTTTAACCCTCCAATTATTGCTCGATACATCCGTTTGCACCCAACTCAT
TATAGCATTCGCAGCACTCTTCGCATGGAGTTGATGGGCTGTGATTTAAATAGTTGCAGCATGC
CATTGGGAATGGAGAGTAAAGCAATATCAGATGCACAGATTACTGCTTCATCCTACTTTACCAA
TATGTTTGCCACCTGGTCTCCTTCAAAAGCTCGACTTCACCTCCAAGGGAGGAGTAATGCCTGG
AGACCTCAGGTGAATAATCCAAAAGAGTGGCTGCAAGTGGACTTCCAGAAGACAATGAAAGTCA
CAGGAGTAACTACTCAGGGAGTAAAATCTCTGCTTACCAGCATGTATGTGAAGGAGTTCCTCAT
CTCCAGCAGTCAAGATGGCCATCAGTGGACTCTCTTTTTTCAGAATGGCAAAGTAAAGGTTTTT
CAGGGAAATCAAGACTCCTTCACACCTGTGGTGAACTCTCTAGACCCACCGTTACTGACTCGCT
ACCTTCGAATTCACCCCCAGAGTTGGGTGCACCAGATTGCCCTGAGGATGGAGGTTCTGGGCTGC
GAGGCACAGGACCTCTACTGA
GGGCGGCCGCTGCAGCACCTGCCACTGCCGTCACCTCTCCCTCCTCAGCTCCAGGGCAGTGTCC
CTCCCTGGCTTGCCTTCTACCTTTGTGCTAAATCCTAGCAGACACTGCCTTGAAGCCTCCTGAA
TTAACTATCATCAGTCCTGCATTTCTTTGGTGGGGGGCCAGGAGGGTGCATCCAATTTAACTTA
ACTCTTACCTATTTTCTGCAGCTGCTCCCAGATTACTCCTTCCTTCCAATATAACTAGGCAAAA
AGAAGTGAGGAGAAACCTGCATGAAAGCATTCTTCCCTGAAAAGTTAGGCCTCTCAGAGTCACC
ACTTCCTCTGTTGTAGAAAAACTATGTGATGAAACTTTGAAAAAGATATTTATGATGTTAACAT
TTCAGGTTAAGCCTCATACGTTTAAAATAAAACTCTCAGTTGTTTATTATCCTGATCAAGCATG
GAACAAAGCATGTTTCAGGATCAGATCAATACAATCTTGGAGTCAAAAGGCAAATCATTTGGAC
AATCTGCAAAATGGAGAGAATACAATAACTACTACAGTAAAGTCTGTTTCTGCTTCCTTACACA
TAGATATAATTATGTTATTTAGTCATTATGAGGGGCACATTCTTATCTCCAAAACTAGCATTCT
TAAACTGAGAATTATAGATGGGGTTCAAGAATCCCTAAGTCCCCTGAAATTATATAAGGCATTC
TGTATAAATGCAAATGTGCATTTTTCTGACGAGTGTCCATAGATATGGGACATATGACGTGAGC

FIG. 4B

TCAGATCTTTGTGAAGGAACCTTACTTCTGTGGTGTGACATAATTGGACAAACTACCTACAGAG
ATTTAAAGCTCTAAGGTAAATATAAAATTTTTAAGTGTATAATGTGTTAAACTACTGATTCTAA
TTGTTTGTGTATTTTAGATTCCAACCTATGGAACTGATGAATGGGAGCAGTGGTGGAATGCCTT
TAATGAGGAAAACCTGTTTTGCTCAGAAGAAATGCCATCTAGTGATGATGAGGCTACTGCTGAG
TGTGAACATTCTACTCCTCCAAAAAAGAAGAGAAAGGTAGAAGACCCCAAGGACTTTCCTTCAG
AATTGCTAAGTTTTTTGAGTCATGCTGTGTTTAGTAATAGAACTCTTGCTTGCTTTGCTATTTA
CACCACAAAGGAAAAAGCTGCACTGCTATACAAGAAAATTATGGAAAAATATTCTGTAACCTTT
ATAAGTAGGCATAACAGTTATAATCATAACATACTGTTTTTTCTTACTCCACACAGGCATAGAG
TGTCTGCTATTAATAACTATGCTCAAAAATTGTGTACCTTTAGCTTTTTAATTTGTAAAGGGGT
TAATAAGGAATATTTGATGTATAGTGCCTTGACTAGAGATCATAATCAGCCATACCACATTTGT
AGAGGTTTTACTTGCTTTAAAAAACCTCCCACACCTCCCCCTGAACCTGAAACATAAAATGAAT
GCAATTGTTGTTGTTAACTTGTTTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCA
CAAATTTCACAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAAACTCATCAA
TGTATCTTATCATGTCTGGATCCTCTACGCCGGACGCATCGTGGCCGGCATCACCGGCGCCACA
GGTGCGGTTGCTGGCGCCTATATCGCCGACATCACCGATGGGGAAGATCGGGCTCGCCACTTCG
GGCTCATGAGCGCTTGTTTCGGCGTGGGTATGGTGGCAGGCCCGTGGCCGGGGGACTGTTGGGC
GCCATCTCCTTGCATGCACCATTCCTTGCGGCGGCGGTGCTCAACGGCCTCAACCTACTACTGG
GCTGCTTCCTAATGCAGGAGTCGCATAAGGGAGAGCGTCGAAATTCTCATGTTTGACAGCTTAT
CATCGGCGCAGCACCATGGCCTGAAATAACCTCTGAAAGAGGAACTTGGTTAGGTACCTTCTGA
GGCGGAAAGAACCAGCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTGGGGAG
CAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGG
CTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCC
CTAACTCCGCCCATCCCGCCCCTAACTCCGCCCAGTTCCGCCCATTCTCCGCCCCATGGCTGAC
TAATTTTTTTTATTTATGCAGAGGCCGAGGCCGCCTCGGCCTCTGAGCTATTCCAGCCGTAGTG
AGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCTTCACGCTGCCGCAAGCACTCAGGGC
GCAAGGGCTGCTAAAGGAAGCGGAACACGTAGAAAGCCAGTCCGCAGAAACGGTGCTGACCCCG
GATGAATGTCAGCTACTGGGCTATCTGGACAAGGGAAAACGCAAGCGCAAAGAGAAAGCAGGTA
GCTTGCAGTGGGCTTACATGGCGATAGCTAGACTGGGCGGTTTTATGGACAGCAAGCGAACCGG
AATTGCCAGCTGGGGCGCCCTCTGGTAAGGTTGGGAAGCCCTGCAAAGTAAACTGGATGGCTTT
CTTGCCGCCAAGGATCTGATGGCGCAGGGGATCAAGATCTGATCAAGAGACAGGATGAGGATCG
TTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGGTGGAGAGGCTAT
TCGGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTCAGC
GCAGGGGCGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCAGGAC
GAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCCTTGCGCAGCTGTGCTCGACGTTG
TCACTGAAGCGGGAAGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATC
TCACCTTGCTCCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTT
GATCCGGCTACCTGCCCATTCGACCACCAAGCGAAACATCGCATCGAGCGAGCACGTACTCGGA
TGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCGA
ACTGTTCGCCAGGCTCAAGGCGCGCATGCCCGACGGCGAGGATCTCGTCGTGACCCATGGCGAT
GCCTGCTTGCCGAATATCATGGTGGAAAATGGCCGCTTTTCTGGATTCATCGACTGTGGCCGGC
TGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGG
CGGCGAATGGGCTGACCGCTTCCTCGTGCTTTACGGTATCGCCGCTCCCGATTCGCAGCGCATC
GCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGCGGGACTCTGGGGTTCGAAATGACCGACCA
AGCGACGCCCAACCTGCCATCACGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGGTTGGGC
TTCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGATCTCATGCTGGAGT
TCTTCGCCCACCCCGGGCTCGATCCCCTCGCGAGTTGGTTCAGCTGCTGCCTGAGGCTGGACGA
CCTCGCGGAGTTCTACCGGCAGTGCAAATCCGTCGGCATCCAGGAAACCAGCAGCGGCTATCCG
CGCATCCATGCCCCCGAACTGCAGGAGTGGGGAGGCACGATGGCCGCTTTGGTCCCGGATCTTT
GTGAAGGAACCTTACTTCTGTGGTGTGACATAATTGGAGAAACTACCTACAGAGATTTAAAGCT
CTAAGGTAAATATAAAATTTTTAAGTGTATAATGTGTTAAACTACTGATTCTAATTGTTTGTGT
ATTTTAGATTCCAACCTATGGAACTGATGAATGGGAGCAGTGGTGGAATGCCTTTAATGAGGAA
AACCTGTTTTGCTCAGAAGAAATGCCATCTAGTGATGATGAGGCTACTGCTGACTCTCAACATT
CTACTCCTCCAAAAAAGAAGAGAAAGGTAGAAGACCCCAAGGACTTTCCTTCAGAATTGCTAAG
TTTTTTGAGTCATGCTGTGTTTAGTAATAGAACTCTTGCTTGCTTTGCTATTTACACCACAAAG
GAAAAAGCTGCACTGCTATACAAGAAAATTATGGAAAAATATTCTGTAACCTTTATAAGTAGGC
ATAACAGTTATAATCATAACATACTGTTTTTTCTTACTCCACACAGGCATAGAGTGTCTGCTAT
TAATAACTATGCTCAAAAATTGTGTACCTTTAGCTTTTTAATTTGTAAAGGGGTTAATAAGGAA

FIG. 4C

TATTTGATGTATAGTGCCTTGACTAGAGATCATAATCAGCCATACCACATTTGTAGAGGTTTTA
CTTGCTTTAAAAAACCTCCCACACCTCCCCCTGAACCTGAAACATAAAATGAATGCAATTGTTG
TTGTTAACTTGTTTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTCAC
AAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAAACTCATCAATGGTATCTTA
TCATGTCTGGATCTCGACCGAGCCCTTGAGAGCCTTCAACCCAGTCAGCTCCTTCCGGTGGGCG
CGGGGCATGACTATCGTCGCCGCACTTATGACTGTCTTCTTTATCATGCAACTCGTAGGACAGG
TGCCGGCAGCGCTCTGGGTCATTTTCGGCGAGGACCGCTTTCGCTGGAGCGCGACGATGATCGG
CCTGTCGCTTGCGGTATTCGGAATCTTGCACGCCCTCGCTCAAGCCTTCGTCACTGGTCCCGCC
ACCAAACGTTTCGGCGAGAAGCAGGCCATTATCGCCGGCATGGCGGCCGACGCGCTGGGCTACG
TCTTGCTGGCGTTCGCGACGCGAGGCTGGATGGCCTTCCCCATTATGATTCTTCTCGCTTCCGG
CGGCATCGGGATGCCCGCGTTGCAGGCCATGCTGTCCAGGCAGGTAGATGACGACCATCAGGGA
CAGCTTCAAGGATCGCTCGCGGCTCTTACCAGCCTAACTTCGATCACTGGACCGCTGATCGTCA
CGGCGATTTATGCCGCCTCGGCGAGCACATGGAACGGGTTGGCATGGATTGTAGGCGCCGCCCT
ATACCTTGTCTGCCTCCCCGCGTTGCGTCGCGGTGCATGGAGCCGGGCCACCTCGACCTGAATG
GAAGCCGGCGGCACCTCGCTAACGGATTCACCACTCCAAGAATTGGAGCCAATCAATTCTTGCG
GAGAACTGTGAATGCGCAAACCAACCCTTGGCAGAACATATCCATCGCGTCCGCCATCTCCAGC
AGCCGCACGCGGCGCATCTCGGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGAC
GAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACC
AGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATA
CCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCAATGCTCACGCTGTACCTATCTC
AGTTCGGTGTACCTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACC
GCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACT
GGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTG
AAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGC
CAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGG
TGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTG
ATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACTCACGTTAAGGGATTTTGGTCATGA
GATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAAAAATGAAGTTTTAAATCAATCTA
AAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCA
GCGATCTGTCTATTTCGTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATAC
GGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCC
AGATTTATCAGCAATAAACCAGCCAGCCAGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTA
TCCGCCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATA
GTTTGCGCAACGTTGTTGCCATTGCTGCAGGCATCGTGGTGTCACGCTCGTCGTTTGGTATGGC
TTCATTCAGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAA
GCGGTTAGCTCCTTCGGTCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCA
TGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTCTGTGAC
TGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCG
GCGTCAACACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAAC
GTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCAC
TCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTCACCAGCGTTTCTGGGTGAGCAAAAACA
GGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCT
TCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGA
ATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGAC
GTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAATAGGCGTATCACGAGGCCCTTTC
GTCTTCAA

FIG. 4D

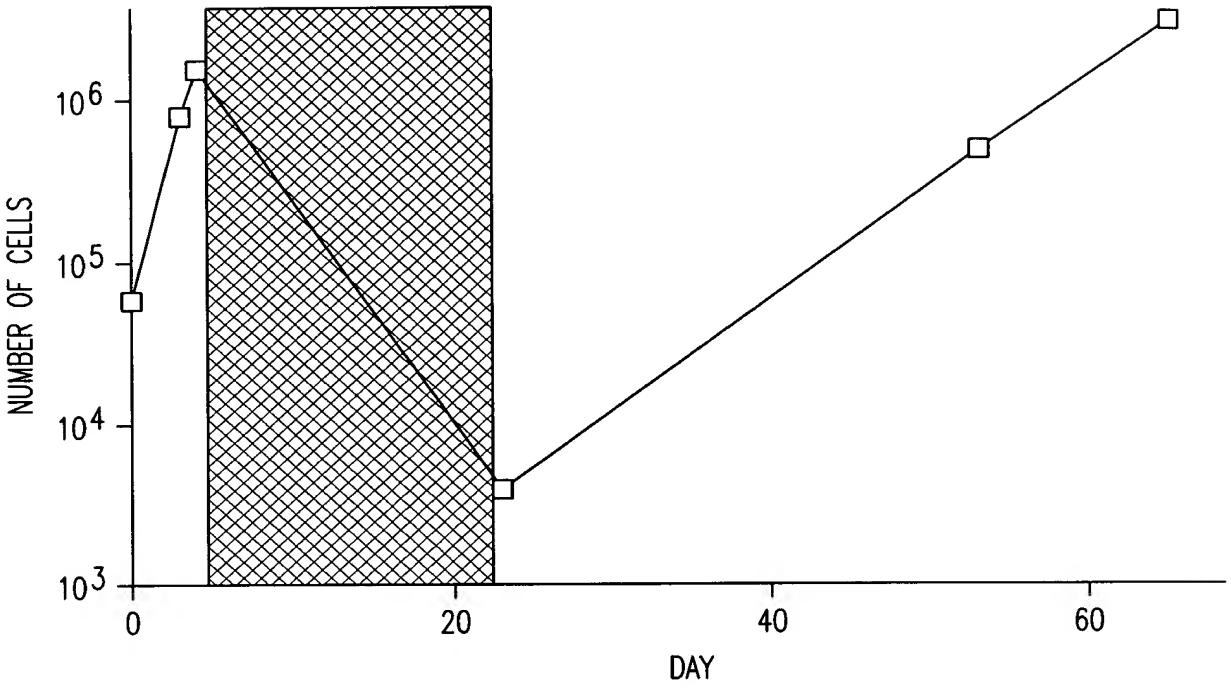
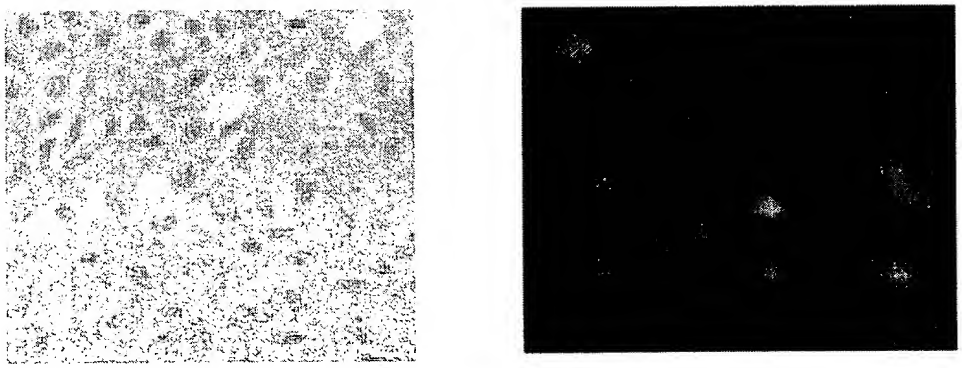


FIG. 5A



MORPHOLOGY & FLUORESCENCE OF PLE9 TRANSDUCED CELLS AT DAY 53

FIG. 5B

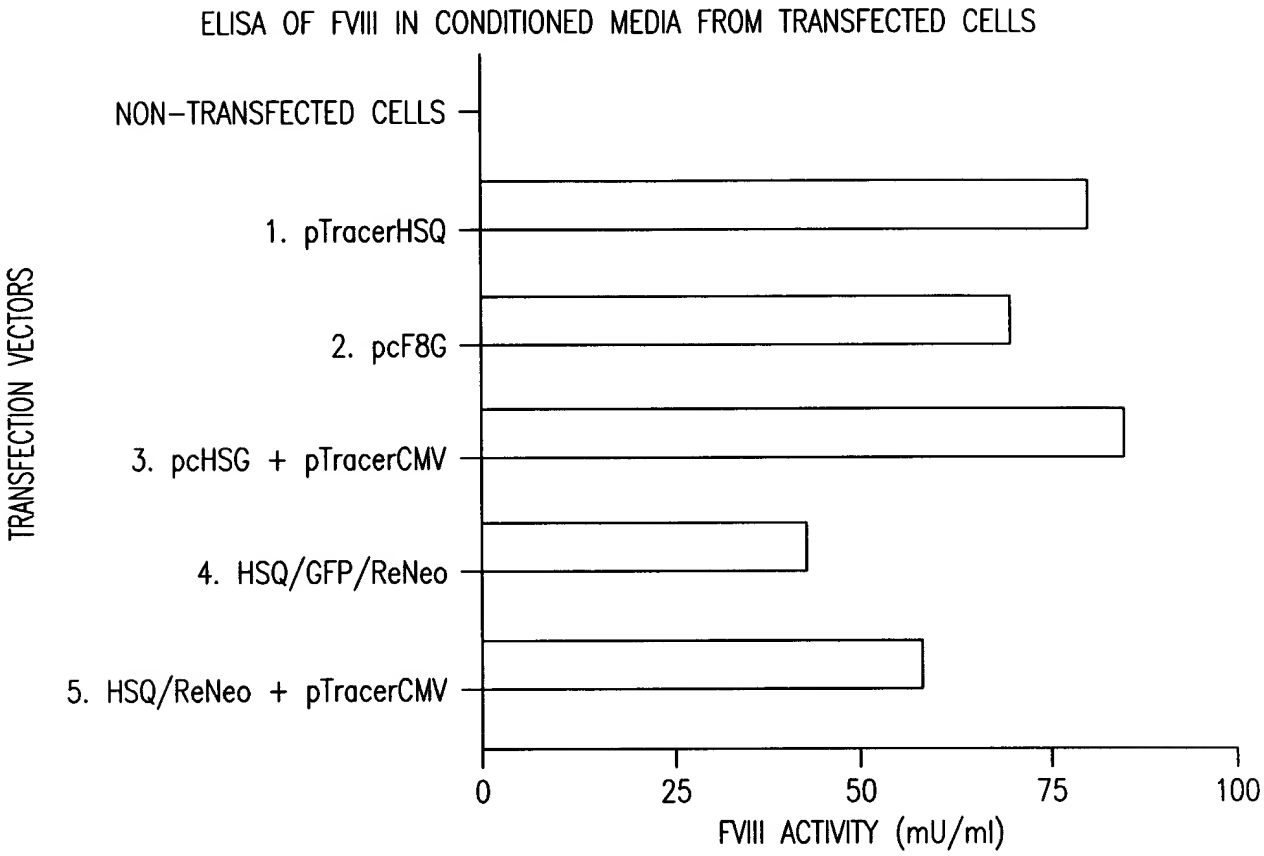


FIG. 6

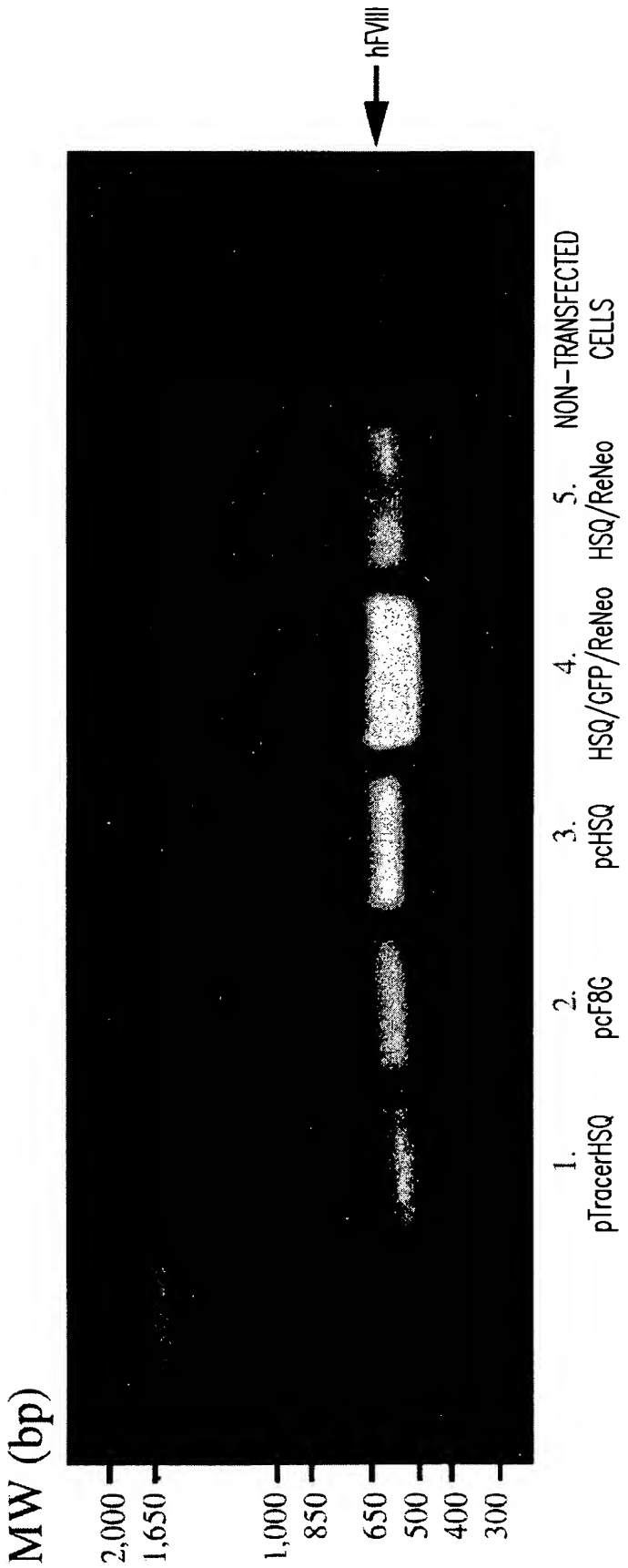


FIG. 7